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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO		
10/624,323	07/22/2003	Thomas M. Williams JR.	P-6185-04-03	7301		
23983	7590 09/23/2004		EXAM	EXAMINER		
MILLS LAW FIRM, PLLC			ROYAL	ROYAL, PAUL		
P.O BOX 12 Cary, NC 2	· <del>-</del>		ART UNIT	PAPER NUMBER		
• •			3611			
			DATE MAILED: 09/23/2004	4		

Please find below and/or attached an Office communication concerning this application or proceeding.

		Anni	ication No.	Applicant(s)				
Office Action Summary								
			24,323	WILLIAMS, THOMAS M.				
	omec Action Cummary		niner _	Art Unit				
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Period fo	The MAILING DATE of this commun or Reply	ucauon appears o	n the cover sneet with the	correspondence ad	aress			
THE I - Exter after - If the - If NO - Failu Any	ORTENED STATUTORY PERIOD F MAILING DATE OF THIS COMMUN nsions of time may be available under the provisions SIX (6) MONTHS from the mailing date of this comr period for reply specified above is less than thirty (3 period for reply is specified above, the maximum st re to reply within the set or extended period for reply reply received by the Office later than three months ed patent term adjustment. See 37 CFR 1.704(b).	ICATION.  i of 37 CFR 1.136(a). In nunication.  ii) days, a reply within the atutory period will apply will, by statute, cause the statute.	no event, however, may a reply be he statutory minimum of thirty (30) d and will expire SIX (6) MONTHS fro he application to become ABANDON	timely filed  ays will be considered timely m the mailing date of this co IED (35 U.S.C. § 133).				
Status								
1) 🛛	Responsive to communication(s) file	ed on 22 July 200	03.					
· —	☐ This action is <b>FINAL</b> . 2b) ☐ This action is non-final.							
3)	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.							
Dispositi	ion of Claims							
5)⊠ 6)⊠ 7)□	Claim(s) 1-11 is/are pending in the application.  4a) Of the above claim(s) is/are withdrawn from consideration.  Claim(s) 1 and 2 is/are allowed.  Claim(s) 3,4 and 11 is/are rejected.  Claim(s) 5-10 is/are objected to.  Claim(s) are subject to restriction and/or election requirement.							
Applicati	ion Papers							
10)🖾	The specification is objected to by the The drawing(s) filed on 22 July 2003. Applicant may not request that any objected transport of the oath or declaration is objected to	is/are: a) acception to the drawing the correction is r	g(s) be held in abeyance. S required if the drawing(s) is o	ee 37 CFR 1.85(a). objected to. See 37 CF	-	,		
Priority ι	under 35 U.S.C. § 119							
a)	Acknowledgment is made of a claim  All b) Some * c) None of:  1. Certified copies of the priority  2. Certified copies of the priority  3. Copies of the certified copies application from the Internation  See the attached detailed Office action	documents have documents have of the priority do onal Bureau (PC)	e been received. e been received in Applica cuments have been recei  Rule 17.2(a)).	ation No ved in this National	Stage			
2) Notice 3) Information	et(s) te of References Cited (PTO-892) te of Draftsperson's Patent Drawing Review (I mation Disclosure Statement(s) (PTO-1449 of the No(s)/Mail Date	•	4)  Interview Summa Paper No(s)/Mail 5)  Notice of Informa 6) Other:		)-152)			

Art Unit: 3611

#### **DETAILED ACTION**

### **Drawings**

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "76" has been used to designate both a "fastener" and "a spring assembly", see Figure 3, and Specification page 6, line 2 and line 24.

Further, in Figure 3, element 78 does not appear to be a "compression spring 78 surrounding a threaded rod 80 having a hook end 82 captured by the shank fastener 50", as stated in the Specification at page 6, lines 24-26.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Art Unit: 3611

# Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 11 recites the limitation "said indicator member" in line 1. There is insufficient antecedent basis for this limitation in the claim. As best understood, applicant is referring to the indicator member 19 introduced in claim 10.

# Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 1. Claim 3 is rejected under 35 U.S.C. 102(b) as being anticipated by Smith (US 5,037,123).

Smith teaches an automatic trailer hitch assembly, usable for coupling an aircraft tug to a tow bar, the tug having a hitch at the rear including upper (31) and lower (33) plates vertically spaced at a rearwardly opening slot for receiving the eyelet (15) of the tow bar wherein the plates have coaxially aligned openings (35,43) and the eyelet of the tow bar has an aperture (15), the hitch assembly comprising:

a locking assembly (55) fixedly connected to the upper plate (31);

Art Unit: 3611

a lock member (36) slidably supported on the locking assembly (55) in coaxial alignment with the opening in the plates and freely slidable between a lowered locked position extending through the openings in the plates and a raised unlatched position spaced above the slot;

lifting means (61) coacting with the lock member (36) for moving the lock member from the locked position and the unlocked position;

detent means (41, 42) coacting with the lock member for releasably maintaining lock member in the unlocked position;

a pair of laterally spaced inwardly converging guide members (50) carried on the hitch between the plates defining a receiving pocket aligning the eyelet with the openings in the plates and the aperture in the eyelet thereby permitting movement of the lock member from the unlocked position to the locked position to couple the tow bar to the tug.

# Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Smith as applied to claim 3, in view of Schmiesing (US 3,889,979).

Smith, as apllied to claim 3, teaches the claimed limitations except wherein the locking assembly includes a cylinder having a bore coaxially with the

Art Unit: 3611

openings in the plate, and the lock member is coaxially attached to a piston slidable in the bore.

Schmiesing teaches an automatic hitching device including wherein the locking assembly includes a cylinder (29) having a bore coaxially with the openings in a plate (14), and the lock member is coaxially attached to a piston (20) slidable in the bore to provide a hitch mechanism which is adaptable to a wide variety of applications.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the automatic trailer hitch assembly of Smith, as applied to claim 3, to include wherein the locking assembly includes a cylinder having a bore coaxially with the openings in the plate, and the lock member is coaxially attached to a piston slidable in the bore, as taught by Schmiesing, to provide a hitch mechanism which is adaptable to a wide variety of applications.

# Allowable Subject Matter

- Claims 1-2 are allowed.
- 4. The following is an examiner's statement of reasons for allowance: the prior art does not show a hitch assembly as recited in the independent claim and as applicable to the dependent claims having a vertical slot formed in the cylinder, a transverse pin member attached to the piston and extending outwardly through the vertical slot, a notch in the upper portion of said cylinder adjacent the vertical slot, and means for rotating the piston and positioning said pin member at the notch to establish said locked position.

Page 6

Art Unit: 3611

5. Claims 5-7 and 8-10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

For claims 5-7, the prior art does not show a hitch assembly as recited in the independent claim and as applicable to the dependent claims having a vertical slot formed in the cylinder, a transverse pin member attached to the piston and extending outwardly through the vertical slot, a notch in the upper portion of said cylinder adjacent the vertical slot, and means for rotating the piston and positioning said pin member at the notch to establish said locked position.

For claims 8-10, the prior art does not show a hitch assembly as recited in the independent claim and as applicable to the dependent claims wherein the guide members are pivotally supported at inner ends to the locking assembly and spring means for biasing the guide members to a normal position establishing the pocket, permitting resilient deflection from the normal position upon impact by the eyelet of the tow bar sufficient to permit the tow bar to orient transverse to the the to accommodate tight radius turns.

Art Unit: 3611

6. Claim 11 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

#### Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Blazer teaches a vehicle coupling. Cain teaches a coupling and support means. Smith '390 teaches a tractor hitch. Wade teaches a hitch assembly. Paterson teaches a self-coupling hitch. Stallings, Jr. et al. teaches a hitch for trailers.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul Royal whose telephone number is 703-308-8570. The examiner can normally be reached on 8:30-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lesley D. Morris can be reached on 703-308-0629. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

P. Royal 9/19/04

Paul Royal Examiner Art Unit 3611

LESLEY D. MORRIS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600